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IN THE CLAIMS

Please cancel claims 4, 6 and 7 without prejudice or disclaimer. Please amend claims 1, 2, 3, 8 and 11-16, and add new claims 18-20 as follows:

Claim 1 (Currently Amended): A non-aqueous solvent-soluble hologram recording material composition comprising consisting of (A) an allyl-based a diallylphthalate-based prepolymer being soluble in a non-aqueous solvent and having at least one allyl group in a molecule thereof and a molecular weight of 10,000 to 100,000, (B) a (meth)acrylate-based compound having at least one polymerizable unsaturated group in a molecule thereof, and (C) a photo-polymerization initiator, wherein a difference between a refractive index of said allyl-based prepolymer (A) and a refractive index of a polymer of said (meth)acrylate compound (B) is 0.005 or more.

Claim 2 (Currently amended): A hologram recording material composition as claimed in claim 1, wherein said composition further comprises A non-aqueous solvent-soluble hologram recording material composition consisting of (A) a diallyphthalate-based prepolymer being soluble in a non-aqueous solvent and having at least one allyl group in a molecule thereof and a molecular weight of 10,000 to 100,000, (B) a (meth)acrylate-based compound having at least one polymerizable unsaturated group in a molecule thereof, and (C) a photo-polymerization initiator, wherein a difference between a refractive index of said allyl-based prepolymer (A) and a refractive index of a polymer of said (meth)acrylate compound (B) is 0.005 or more, and (D) a solvent-soluble

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thermoplastic resin in a weight ratio to said allyl-based prepolymer (A), (A): (D) of 80 to 100: 20

to 0.

Claim 3 (Currently amended): A hologram recording material composition as claimed in

claim 1, wherein said allyl-based diallylphthalate-based prepolymer (A) is a homopolymer of an

allyl-based monomer having at least two allyl groups in a molecule thereof or a copolymer of said

allyl-based monomer and another copolymerizable monomer, the copolymer containing a polymeric

unit of said allyl-based monomer in an amount of more than 20% (excluding 20%).

Claim 4 (Canceled):

Claim 5 (Original): A hologram recording material composition as claimed in claim 1,

wherein said allyl-based prepolymer (A) is an organic-inorganic complex transparent uniform

material obtained by subjecting a metallic alkoxide having a metallic atom, a group having an

aromatic ring, and a hydrolyzable group to dehydration condensation by a sol-gel method in the

presence of a diallyl phthalate-based monomer and/or a diallyl phthalate-based polymer.

Claim 6 (Canceled):

Claim 7 (Canceled):

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Claim 8 (Currently amended): A hologram recording material composition as claimed in

claim 71, wherein said diallylphthalate-based prepolymer is a prepolymer selected from the group

consisting of a diallylorthophthalate prepolymer, a diallylisophthalate prepolymer and a

diallylterephthalate prepolymer, or a combination of two or more thereof.

Claim 9 (Original): A hologram recording material composition as claimed in claim 1,

wherein said (meth)acrylate-based compound (B) contains from 1 to 6 of polymerizable unsaturated

group, and has a molecular weight of 2,000 or less.

Claim 10 (Original): A hologram recording material composition as claimed in claim 1,

wherein said (meth)acrylate-based compound (B) contains two of polymerizable unsaturated group.

Claim 11 (Currently amended): A hologram recording material composition as claimed

in claim 1, wherein said composition further comprises A non-aqueous solvent-soluble hologram

recording material composition consisting of (A) a diallylphthalate-based prepolymer being soluble

in a non-aqueous solvent and having at least one allyl group in a molecule thereof and a molecular

weight of 10,000 to 100,000, (B) a (meth)acrylate-based compound having at least one

polymerizable unsaturated group in a molecule thereof, and (C) a photo-polymerization initiator,

wherein a difference between a refractive index of said allyl-based prepolymer (A) and a refractive

index of a polymer of said (meth)acrylate compound (B) is 0.005 or more, and a viscosity reducing

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agent (E);

and said (meth)acrylate-based compound (B) contains at least one radical polymerizable compound (b1) selected from the group consisting of a fluorene-based compound represented by the general formula [I],

$$R_1-M_1$$
 X_1
 X_2
 X_2

wherein R_1 and R_2 , being the same or different, are monovalent organic groups, at least one of which has a radical polymerizable group at its terminal, M_1 and M_2 , being the same or different, are divalent organic groups represented by $-(OR)_{n1}$ - (wherein R is lower alkylene which can have hydroxyl and/or oxygen, and n1 is 0 or an integer of 1 to 5) or single bonds, and X_1 and X_2 , being the same or different, are substituents of the rings and are halogen, hydroxyl or lower alkyl, a sulfide-based cyclic compound represented by the general formula [II],

$$R_3 - M_3 - S - M_4 - R_4$$
 [11]

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wherein R_3 and R_4 , being the same or different, are monovalent organic groups, at least one of which has a radical polymerizable group at its terminal, M_3 and M_4 , being the same or different, are divalent organic groups represented by $-(OR)_{n2}$ - (wherein R is lower alkylene which can have hydroxyl and/or oxygen, and n2 is 0 or an integer of 1 to 5) or single bonds, X_3 is a substituent of the ring and is halogen, hydroxyl or lower alkyl, "l" is an X_3 number of 0 to 6, Y_1 is a ring member atom constituting the ring, all of the atoms $(Y_1)_m$ are carbon atoms, or a portion of them is carbon atom(s) and the rest atoms are heteroatoms, and "m" is a member number of the ring of 5 to 8, a halogenated cyclic compound represented by the general formula [III],

$$(X_4)_q$$
 $(M_5-R_5)_p$ [III]

wherein X_4 is a substituent of the ring, at least one of plural $(X_4)_q$ is halogen and others are hydroxyl or lower alkyl, "q" is an integer of 2 to 6, R_5 is a monovalent organic group, at least one of plural $(R_5)_p$ has a radical polymerizable group at its terminal, M_5 is a divalent organic group represented by $(OR)_{n3}$ - (wherein R is lower alkylene which can have hydroxyl and/or oxygen, and n3 is 0 or an integer of 1 to 5) or a single bond, "p" is an integer of 1 to 4, Y_2 is a ring member atom constituting the ring, all of the atoms $(Y_2)_k$ are carbon atoms, or a portion of them is carbon atom(s) and the rest atoms are heteroatoms, and "k" is a member number of the ring of 5 to 8, and

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a carbazole-based compound represented by the general formula [IV],

$$X_5$$
 X_6
 X_6
 X_6
 X_6
 X_6
 X_7
 X_7
 X_7

wherein R_6 , R_7 and R_8 , being the same or different, are monovalent organic groups, at least one of which has a radical polymerizable group at its terminal, M_6 , M_7 and M_8 , being the same or different, are divalent organic groups represented by $-(OR)_{n4}$ - (wherein R is lower alkylene which can have hydroxyl and/or oxygen, and n4 is 0 or an integer of 1 to 5) or single bonds, and X_5 and X_6 , being the same or different, are substituents of the ring and are halogen, hydroxyl or lower alkyl.

Claim 12 (Original): A hologram recording material composition as claimed in claim 11, wherein a weight ratio of at least one radical polymerizable compound (b1) selected from the group consisting of a fluorene-based compound [I], a sulfide-based cyclic compound [II], a halogenated cyclic compound [III] and a carbazole-based compound [IV] to at least one radical polymerizable compound (b2) selected from the group consisting of the other radical polymerizable compounds than the fluorene-based compound [I], the sulfide-based cyclic compound [II], the halogenated cyclic compound [III] and the carbazole-based compound [IV], (b1): (b2) is 10 to 100: 0 to 90 in said (meth)acrylate-based compound (B).

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Claim 13 (Original): A hologram recording material composition as claimed in claim 2,

wherein said solvent-soluble thermoplastic resin (D) has a refractive index of 1.300 to 1.800.

Claim 14 (Original): A hologram recording material composition as claimed in claim 2,

wherein said solvent-soluble thermoplastic resin (D) is one or a combination of two or more selected

from the group consisting of a condensation polymerization product of a diphenol compound and

a dicarboxylic acid compound, a resin having a carbonate group in a molecule thereof, a resin having

an -SO₂- group in a molecule thereof, polyvinylidene chloride, and a homopolymer or copolymer

obtained by polymerizing at least one monomer having an ethylenic unsaturated double bond.

Claim 15 (Original): A hologram recording material composition as claimed in claim 11,

wherein said viscosity reducing agent (E) is a compound (e1) which in nonreactive on said allyl-

based prepolymer (A) and said (meth)acrylate-based compound (B) or a compound (e2) having allyl

or methallyl in a molecule thereof.

Claim 16 (Currently amended): A hologram recording medium comprising a substrate

having formed thereon a recording layer comprising a hologram recording material composition

claimed in claim 1 or 17.

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Claim 17 (Original): A non-aqueous solvent-based hologram recording material

composition comprising (A) an allyl-based prepolymer having at least one allyl group in a molecule

thereof and a molecular weight of 10,000 to 100,000, (B) a (meth)acrylate-based compound having

at least one polymerizable unsaturated group in a molecule thereof, (C) a photo-polymerization

initiator, and a non-aqueous solvent, wherein a difference between a refractive index of said allyl-

based prepolymer (A) and a refractive index of a polymer of said (meth)acrylate compound (B) is

0.005 or more.

Claim 18 (New): A method of recording a hologram comprising using the recording medium

claims in claim 16.

Claim 19 (New): A method of recording a hologram comprising irradiating the recording

medium claimed in claim 16 with two laser lights which are in coherence to record an interference

fringe to be a hologram.

Claim 20 (New): A method of copying a hologram comprising superposing an original image

- recorded hologram plate on the recording medium claimed in claim 16, and irradiating the

hologram plate with light.

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